WHAT IS CLAIMED IS:

1. A fiber produced from a composition comprising at least one hydrogenated block copolymer and, optionally, at least one other polymer selected from the group consisting of a reactive tailored liquid polyurethane, an elastomeric or sulfonated ethylene/vinyl aromatic interpolymer, an elastomeric ethylene/C_3-C_{20} α-olefin interpolymer, an C_3-C_{20} α-olefin/conjugated diene interpolymer, an elastic polypropylene polymer, an enhanced polypropylene polymer, an elastomeric thermoplastic polyurethane, an elastic polyester, a partially hydrogenated block copolymer, an elastic polyamide, a hydroxyl functionalized polyether (or polyetheramine), a styrene/conjugated diene interpolymer, and an elastomeric metallocene-catalyzed synthetic polymer or a blend or formulated system thereof,

wherein the hydrogenated block copolymer is a substantially hydrogenated block copolymer characterized as having:

i) a weight ratio of conjugated diene monomer unit to vinyl aromatic monomer unit before hydrogenation of greater than or equal to 60:40;

ii) a weight average molecular weight (M_w) before hydrogenation of from about 30,000 to about 150,000, wherein each vinyl aromatic monomer unit (a) has a weight average molecular weight, Mw_a, of from about 5,000 to about 45,000 and each conjugated diene monomer unit (b) has a weight average molecular weight, Mw_b, of from about 12,000 to about 110,000; and

iii) a hydrogenation level such that each vinyl aromatic monomer unit block is hydrogenated to a level of greater than 90 percent and each conjugated diene monomer unit block is hydrogenated to a level of greater than 95 percent, as determined using UV-VIS spectrophotometry and proton NMR analysis.

2. A composite having a nonwoven portion comprising the fiber of Claim 1.

3. The composite of Claim 2, which comprises leg gathers, leg bands, sidepanels or a waistband.

4. A fabric, thread, filament, ribbon or fibrous web comprising the fiber of Claim 1.

5. A nonwoven strip or ribbon comprising the fiber of Claim 1.

6. The fiber of Claim 1 wherein the fiber is monofilament, bicomponent or multicomponent .

7. The fiber of Claim 1, wherein the fiber is surface treated or crosslinked.

8. A core/sheath structure comprising the fiber of Claim 1.

9. A composite structure comprising the fiber of Claim 1.

10. An absorbent item comprising the fiber of Claim 1.

11. A nonwoven item comprising the fiber of Claim 1.

12. An apparel accessory item comprising the fiber of Claim 1.

13. The accessory item of Claim 12, wherein the item is a belt, sock, ribbon, headband, or hat.

14. A woven or knitted item comprising the fiber of Claim 1.

15. A carpet comprising the fiber of Claim 1.

16. A diaper comprising the fiber of Claim 1.

17. A incontinence pad comprising the fiber of Claim 1.

18. A sanitary napkin comprising the fiber of Claim 1.

19. A yarn comprising the fiber of Claim 1.

20. A textile item comprising the fiber of Claim 1.

21. The fiber of Claim 1, wherein fiber thickness is in the range of from about 0.1 micron to about 24 mils.

22. The fiber of Claim1, wherein the at least one other polymeric material is a homogeneously branched ethylene polymer.

23. The fiber of Claim 1, wherein the substantially hydrogenated block copolymer is a triblock having, before hydrogenation, two vinyl aromatic monomer unit blocks and one conjugated diene monomer unit block.

24. The fiber of Claim 1, wherein each vinyl aromatic monomer unit block has a weight average molecular weight less than or equal to 15,000.

25. The fiber of Claim 1, wherein at least one of the vinyl aromatic monomer unit blocks comprises styrene.

26. The elastic article of Claim 1, wherein the conjugated diene monomer unit block is butadiene.

27. An elastic fiber produced from a composition comprising at least one substantially hydrogenated block copolymer, wherein the block polymer is characterized as having

i) a weight ratio of conjugated diene monomer unit to vinyl aromatic monomer unit before hydrogenation of greater than or equal to 60:40;

ii) a viscosity at 0.1 rad/sec and 190°C, determined using parallel plate rheometry, defined by the inequality:

$$\ln \text{viscosity at } 0.1 \text{ rad/sec} \leq (7.08 \times 10^{-5})(M_w) + 7.89; \text{ and}$$

iii) a hydrogenation level such that each vinyl aromatic monomer unit block is hydrogenated to a level of greater than 90 percent and each conjugated diene monomer

unit block is hydrogenated to a level of greater than 95 percent, as determined using UV-VIS spectrophotometry and proton NMR analysis.